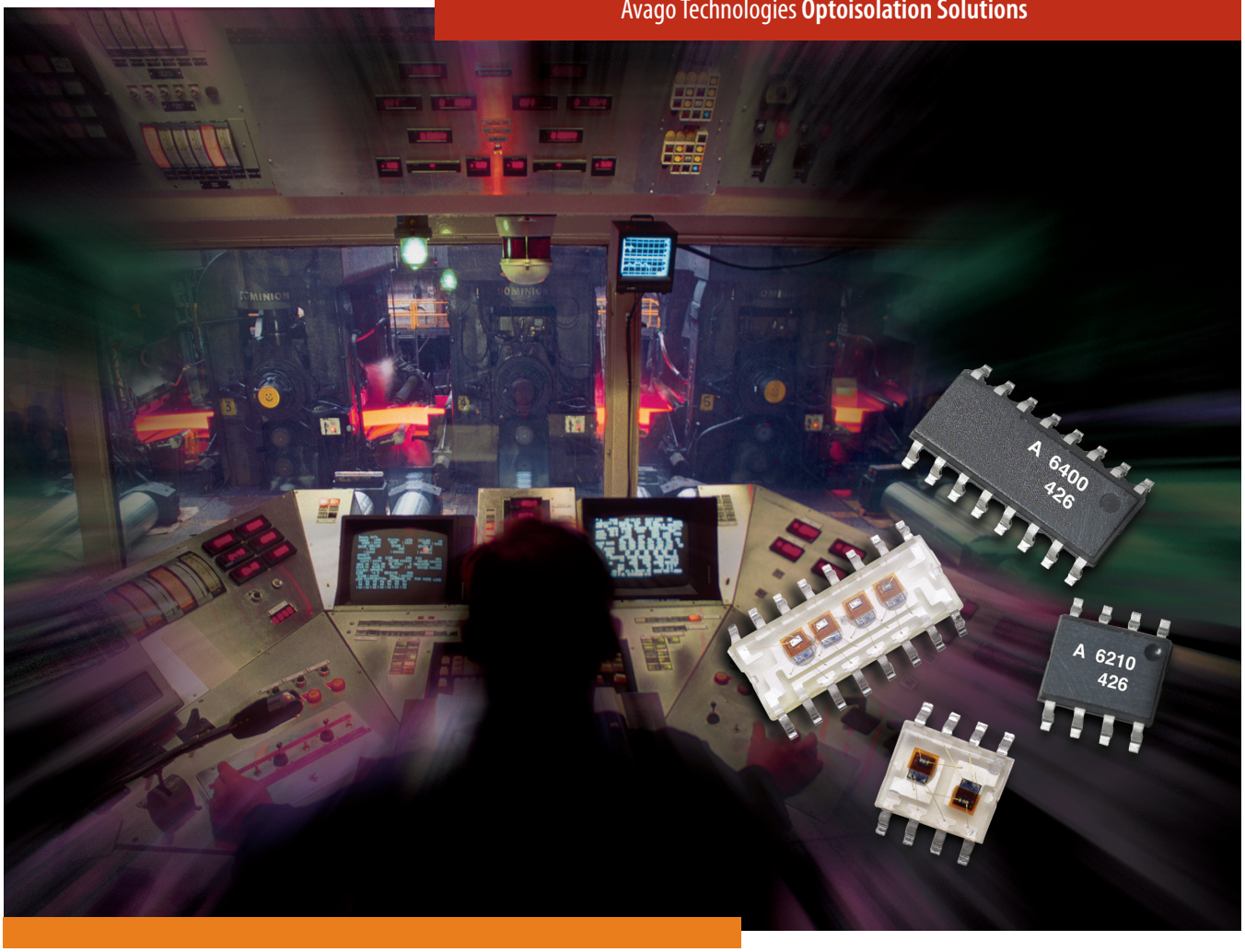

ACSL-6xx0 Multi-Channel & Bi-Directional 15MBd Digital Logic Gate Optocoupler

The Industry's First Multi-Channel and Bi-Directional Optocouplers for High-Speed Digital Isolation Applications

ACSL-6xx0 series are truly isolated, multi-channels and bi-directional, high-speed optocouplers. Integration of multiple optocouplers in monolithic form is achieved through patented process technology. These devices provide full duplex and bi-directional isolated data transfer and communication capability in compact surface mount packages. These optocouplers are available in 15Mbd speed option, wide supply voltage range and wide temperature range.

The high channel density makes ACSL-6xx0 ideally suited for isolating data conversion devices, parallel buses and peripheral interfaces. They are available in 8-pin and 16-pin narrow body SOIC package and are specified over the temperature range of -40°C to +100°C.

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Features and Benefits

- **High Integration**
  - Available in Dual, Triple and Quad Channel Configurations
  - Bi-Directional
  - 16 Pin narrow body SOIC Package for Triple and Quad Channel
- **Wide Supply Voltage Range**
  - 3.0V to 5.5V
  - High-Speed: 15MBd typical
- **Wide Temperature Range**
  - -40 to 100°C Temperature Range
- **Safety and Regulatory Approvals** (Pending)
  - 2500V rms for 1 min. per UL1577
  - CSA Component Acceptance
  - IEC/EN/DIN EN 60747-5-2

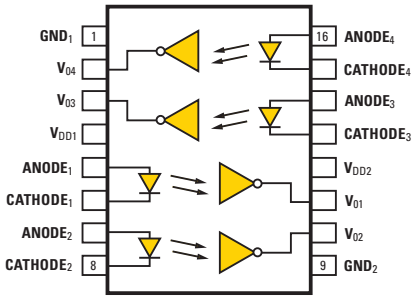
Applications

- Inter-Integrated Circuit e.g. Power over Ethernet, Power System, I^2C long transmission
- Full Duplex Communication
- Isolated Line Receiver
- Computer-Peripheral Interfaces
- Microprocessor System Interfaces
- Digital Isolation for A/D and D/A Conversion
- Switching Power Supply
- Instrument Input/Output Isolation
- Ground Loop Elimination
- Pulse Transformer Replacement

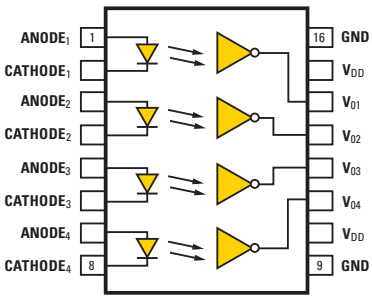
Product Selection

Agilent Part Number	Product Description
ACSL-6210-00RE	3-5.5V, 15MBd, Bi-Dir, 8-pin Small Outline
ACSL-6300-00TE	3-5.5V, 15MBd, All-in-One, 16-pin Small Outline
ACSL-6310-00TE	3-5.5V, 15MBd, Bi-Dir, 2/1, 16-pin Small Outline
ACSL-6400-00TE	3-5.5V, 15MBd, All-in-One, 16-pin Small Outline
ACSL-6410-00TE	3-5.5V, 15MBd, Bi-Dir, 3/1, 16-pin Small Outline
ACSL-6420-00TE	3-5.5V, 15MBd, Bi-Dir, 2/2, 16-pin Small Outline

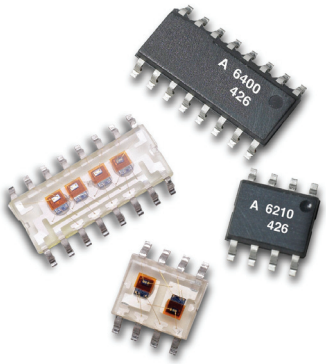
Functional Block Diagram ACSL-6420 and ACSL-6400



ACSL-6420 Quad Channel Bi-Directional



ACSL-6400 Quad Channel All-in-One



To find out more visit
www.avagotech.com/optocoupler

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